

# WASTE MANAGEMENT PLAN

## DEMOLITION OF EXISTING STRUCTURES AND CONSTRUCTION OF NEW TWO STOREY SEMI-DETACHED DWELLINGS WITH BASEMENT CAR PARKING

12 GROVE STREET EARLWOOD NSW 2206 LOT 10 SECTION 8 DP 32036 LOT 11 SECTION 8 DP 32036

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### **1** INTRODUCTION

This Waste Management Plan (WMP) is used to inform the building design, deliver best practice waste management for the site and promote sustainable outcomes for the proposed demolition of existing structures and the construction of new two storey semi-detached dwellings with basement car parking on the site located at 12 Grove Street, Earlwood. This WMP addresses the requirements of the Consent Authority and conforms to the following reference documents:

- Canterbury-Bankstown Local Environmental Plan 2023 (CBLEP 2023)
- Canterbury-Bankstown Development Control Plan 2023 (CBDCP 2023).

This WMP outlines measures to minimise and manage waste generated during construction processes, as well as the ongoing use of the site. The below guiding principles are to be followed during the proposed development:

- a) Minimise waste generation and disposal to landfill wherever possible during the construction phase;
- b) Ensure waste can be effectively managed onsite;
- c) Ensure that it is as easy to recycle as it is to dispose of garbage during all stages of development;
- d) Ensure that users can easily use and understand waste management systems;
- e) Ensure adequate storage areas are provided for general and recyclable waste during all stages of development;
- f) Ensure easy and efficient transportation of waste can occur onsite;
- g) Ensure safe access and manoeuvrability for waste collection vehicles during all stages of development; and
- h) Ensure the development is planned and equipped for the on-going waste management during operational life.

## 2 BACKGROUND

#### 2.1 SITE ANALYSIS

The subject site is located at 12 Grove Street, Earlwood. The site contains two separate parcels of land titled Lot 10 Section 8 DP 32036 and Lot 11 Section 8 DP 32036. The site is arranged on an east-west tangent and is orientated to address the site frontage of Grove Street to the west. The site slopes gently downwards from the front boundary to the rear and is relatively flat between the northern and southern side boundaries. The aerial image below shows the orientation of the subject site and its location relative to surrounding properties.



Figure 1: Aerial View of Subject Site and Surrounding Properties

The site is rectangular in shape with a 12.19m frontage to Grove Street, 32.31m northern and southern side boundaries and a 12.19m rear boundary. Lot 10 has a total area of 196.9m<sup>2</sup> and Lot 11 an area of 196.9m<sup>2</sup>. The total site area is 393.8m<sup>2</sup>. The site presently contains a two storey detached dwelling house of metal clad construction with a pitched and tiled roof form, a detached outbuilding at the rear, a single carport within the site frontage and driveway access from Grove Street. All existing structures on the site are to be demolished under this application.

#### 2.2 PROPOSED LAND USE AND BUILT FORM

The proposal seeks development consent from Council for the construction of a two storey semi-detached dwelling development with basement car parking level in accordance with the Architectural Plans submitted with this application. This includes the following elements within each dwelling:

BASEMENT LEVEL		
•	Stacked car parking area for two vehicles	
•	Bicycle storage	
•	Laundry	
•	Bin storage	
•	Stair access to ground floor level	
GROUND FLOOR LEVEL		
•	Entry feature	

- Guest bedroom
- W/C
- Open plan kitchen, living and dining area
- Lift and stair access to first floor level
- Outdoor alfresco area

#### FIRST FLOOR LEVEL

- Front balcony
- Master bedroom with ensuite and walk-in-wardrobe
- Two bedrooms
- Bathroom

The final development has the following site dimensions:

LOT 10	LOT 11
Site Area – 196.9m <sup>2</sup>	Site Area – 196.9m <sup>2</sup>
Gross Floor Area – 127.94m <sup>2</sup>	Gross Floor Area – 127.94 <sup>2</sup>
Landscaped Area – 52.65m <sup>2</sup>	Landscaped Area – 53.42m <sup>2</sup>
Private Open Space – 46.92m	Private Open Space – 46.27m <sup>2</sup>

#### 2.2.1 LANDSCAPING WORKS

As detailed on the Architectural Plans submitted with this application, the proposed development involves deep soil landscaping and vegetation within the front setback to Grove Street, as well as the provision of landscaping along the side and rear boundaries of the site. A total of 52.65m<sup>2</sup> of landscaping is proposed within Lot 10 and 53.42m<sup>2</sup> within Lot 11. Landscape treatment is commensurate with the proposed works and will help to soften the appearance of the built form and hardstand areas, whilst contributing to the well-maintained landscape characteristic of the locality.

#### 2.2.2 SITE ACCESS AND CAR PARKING

The proposed development contains a basement level to provide for the on-site car parking needs of the residents. Each basement provides a single width garage where two vehicles can park in a stacked configuration. A new driveway is to be constructed to provide access to the development from Grove Street to the west.

#### 2.2.3 PRIVATE OPEN SPACE

The proposed development has been designed to achieve numerical compliance with the CBDCP 2023 requirements for private open space. 46.92m<sup>2</sup> of private open space is provided to Lot 10 and 46.27m<sup>2</sup> to Lot 11 in the form of an outdoor alfresco area with landscaped open space beyond at the rear of the site. The proposed private open space areas are accessed directly from the internal living area on the ground floor level of each dwelling, ensuring that the spaces act as an extension of the open plan kitchen, living and dining areas. The proposed location and configuration of private open space on the site will provide a high level of amenity for future occupants whilst retaining the privacy and solar access of neighbouring properties. Fencing and landscape elements within the side and rear setbacks of the site will provide a visual and acoustic buffer to nearby buildings.

#### 2.2.4 EXTERNAL APPEARANCE AND DESIGN

The proposed development incorporates a range of projecting façade elements, both straight and curved detailing, a recessed basement car parking, variations in the roof profile and multiple uniform windows on the building elevations to provide visual interest and articulation when viewed from the public domain. A range of materials and finishes are proposed including white brickwork, architectural render, reinforced concrete, timber slats, glass balustrades and Colorbond metal roofing to provide further modulation. The proposed colour scheme assists in breaking up the visual bulk of the development and will ensure compatibility with the surrounding built and natural environment.

## **3 DEMOLITION**

To facilitate the proposed development, the existing dwelling house, detached outbuilding, carport and driveway access on the site are to be demolished in accordance with the Demolition Plan submitted with this application and shown below. The proposed development will retain the original façade and roof form of the dwelling house. Consideration will be given to the re-use of materials at construction stage.



Figure 2: Demolition Plan

Demolition on the site is to comply with the following:

- 1. All demolition must be carried out in accordance with Australian Standard AS 2601- 2001- The Demolition of Structures.
- 2. All building materials containing asbestos must be carefully handled and removed from the site in accordance with WorkCover requirements.
- 3. To minimise dust and debris that cause an unnecessary hazard and/or damage to surrounding properties, appropriate protective measures must be taken.
- 4. To minimise sediment movement and water pollution due to surface run off, protective environmental site management measures must be employed on site.
- 5. To minimise damage to street trees, footpaths, kerbing and road pavements, protective measures must be employed.

Demolition on the site is to comply with the relevant Australian Standards and the Construction Environmental Management Plan (CEMP). Suitable mitigation measures are to be incorporated at demolition stage to avoid adverse impacts on the site and for adjoining properties by way of dust and debris, sediment movement and water pollution. In the unlikely event that there is asbestos found on the site, the removal, handling and disposal of asbestos or other hazardous materials shall be carried out in accordance with WorkCover NSW, NSW Environment & Protection Authority (EPA), Office of Environment and Heritage and other regulatory authority guidelines and requirements.

## **4** CONSTRUCTION

Construction activities at the site will generate a range of construction wastes. Waste storage during construction operations will involve some stockpiling of excavated and reusable material, as well as placement of skip bins for the separation of construction materials for recycling. A skip bin for residual waste or contaminated material will also be made available at the site for disposal where necessary. Skip bins may require alternative placement across construction operations to facilitate the safe and efficient storage of materials and will be retained within property boundaries to avoid illegal dumping.

The quantities, densities and bulking factors for waste and recyclables has been determined based on provisions set out in the Canterbury Bankstown Council's Waste Management controls. The following objectives are to be implemented on the site during the construction phase:

- Incorporate the use of prefabricated components and recycled materials where appropriate;
- Arrange for the delivery of materials so that materials are delivered 'as needed' to prevent degradation of materials through weathering and moisture damage causing additional waste; and
- Return excess materials to supplier or manufacturer as appropriate.

All waste and recycling is to be wholly located in a dedicated storage area on the site. Storage areas are to provide adequate capacity for storing all the waste and recycling likely to be generated between collection cycles, based on expected waste generation and selected bin types and accommodate likely peak demand for waste storage capacity.

Waste and recycling materials are to be kept separate from construction materials, and all materials will be stored in bulk bins that are able to be covered to prevent damage by the elements, odour, health risks, and windborne litter. Waste storage areas are to be kept clear to maintain pedestrian access and shall also be kept tidy to encourage separation of waste materials and for WHS reasons. Waste management principles, management measures and facilities in use on the site shall be included as part of the site induction for all personnel working on the site.

#### 4.1 CONSTRUCTION

Construction works on the site include the following:

• Construction of two storey semi-detached dwelling development.

Waste volumes produced by excavation and construction stages shall be estimated accurately by the contractor at the Construction Certificate stage. Where possible, materials shall be reused or recycled, with disposal being the last resort. The table below outlines the estimated excavation and construction waste quantities to be generated at the site, in addition to the appropriate management methods for each material type.

Туре	Reuse	Recycle	Disposal	Method
Excavation Material	Less than 10m <sup>3</sup>			Spread on Site
Timber		More than 10m <sup>3</sup>		Contract Recycle Depot
Concrete		Less than 10m <sup>3</sup>		Contract Recycle Depot
Green Waste			Less than 10m <sup>3</sup>	Refuse Depot
Bricks		Less than 10m <sup>3</sup>		Contract Recycle Depot
Plasterboard		Less than 10m <sup>3</sup>		Contract Recycle Depot
Metals		Less than 10m <sup>3</sup>		Contract Recycle Depot
Hazardous Materials (Asbestes	None	None	None	N/A
iviaterials/Asbestos				

#### 4.2 WASTE CONTRACTORS AND FACILITIES

To ensure best practice waste management, appropriate contractors and facilities have been proposed based on their location and service offerings. Refer to the table below.

Role	Details		
Recommended Waste Collection Contractor	The following are local skip bin operators for consideration in		
	the management of construction waste for the site:		
	Brown Bros Bins		
	BINGO Industries		
	Aussie Skips		
	Or another supplier as elected by the building contractor.		
Principal Off-Site Recycler	The following are local construction processing facilities for		
	consideration in the management of waste generated at the		
	site:		
	BINGO Industries Recycling Centre		
	On another community facility of classed by the constant		
	Or another appropriate facility as elected by the waste		
	management contractor.		
Principal Licensed Landfill Site	The following are licenced landfills sites for consideration in the		
	construction landfill:		
	Suez Resource Recovery		
	On other engrangiate facility on elected by the waste		
	Or other appropriate facility as elected by the waste		
	management contractor.		

#### 4.3 SITE DOCUMENTATION

This WMP will be retained on-site during the construction phase of the development, along with other waste management documentation (e.g. contracts with waste service providers). Responsibility for the WMP, waste documentation and processes during the excavation and construction phases will be with the site manager or builder. A logbook that records waste management and collection will be maintained on site, with entries including:

- Time and date of collections;
- Description of waste and quantity;
- Waste/processing facility that will receive the waste; and
- Vehicle registration and company name.

Waste management documentation, the logbook and associated dockets and receipts must be made available for inspection by an authorised Council Officer at any time during site works.

## 5 ONGOING WASTE MANAGEMENT

Ongoing waste management requirements for the site will result from the daily occupation of the constructed dwelling house. Waste management at the site will be in accordance with Canterbury Bankstown Council's Waste Management controls and the NSW EPA's *Better Practice Guide for Resource Recovery in Residential Developments* (2019). Waste generation through the residential occupation of the development will be addressed in applying waste generation rates outlined in **Section 4.1** and waste bin requirements in **Section 4.2** below.

The following bin dimensions are sourced from the Waste Management Guideline:

Bin Capacity (L)	Height (mm)	Depth (mm)	Width (mm)	Footprint (Approx. m <sup>2</sup> )
120L Garbage Bin	940	560	485	0.27
240L Recycling Bin	1080	735	580	0.43
240L Green Waste	1080	735	580	0.43
Bin				

#### 5.1 WASTE GENERATION RATES

The below tables outline's waste generation rates applicable to the proposed secondary dwelling:

Waste Stream	Per Week (L)
General Waste	100
Recycling Waste	120
Garden Organics	120
Food Waste	4

#### 5.2 WASTE REQUIREMENTS ON SITE

Proposed waste management on the site conforms to the following controls of the CBDCP 2023:

- Each dwelling allows for the storage and presentation of 3 (three) 240L bins.
- Bins are presented at the kerb on Grove Street for collection.
- The collection area has sufficient clearance from any obstruction such as a driveway, marked parking or street trees.
- Bins are located within the basement level and are not visible from the street.
- The waste bin storage area is easily accessed from the dwelling house.
- The path of travel for moving bins between storage and collection is smooth and unobstructed.

The following waste storage and management is anticipated to occur on the site:

- Waste collected in 120 or 240 litre MGBs weekly.
- Recycling collected in 120 or 240 litre MGBs weekly.
- Opt-in Garden Organics collected in 240 litre MGBs once per fortnight.
- Two bulky waste collections per fortnight.
- Weekly mattress recycling and clean-up service by booking only.
- Regular e-waste recycling drop-off days and chemical cleanout events for problem waste.